Acta Phytotaxonomica Sinica

兰属中若干分类群的订正

1陈心启 2刘仲健

(中国科学院植物研究所系统与进化植物学重点实验室 北京 100093) 《深圳市梧桐山苗圃总场 深圳 518114)

Critical notes on some taxa of Cymbidium

¹CHEN Sing-Chi ²LIU Zhong-Jian

 $\mbox{\it Key Laboratory of Systematic and Evolutionary Botany}$, Institute of Botany , the Chinese Academy of Sciences , Beijing 100093 , China)

²(Shenzhen City Wutongshan Nurseries , Shenzhen 518114 , China)

Abstract Four confused taxa of *Cymbidium* (Orchidaceae) are discussed taxonomically based on an examination of many living plants. As a result, *Cymbidium tortisepalum* Fukuyama and *C. omeiense* Y. S. Wu et S. C. Chen are recognized as separate species, *C. longibracteatum* Y. S. Wu et S. C. Chen as a variety of *C. tortisepalum* Fukuyama, and *C. szechuanicum* Y. S. Wu et S. C. Chen as a variety of *C. cyperifolium* Wall. ex Lindl. Due to the lose of the types and all the cited specimens of *Cymbidium longibracteatum*, *C. omeiense* and *C. szechuanicum* in PE over 30 years ago, their neotypes are here designated.

Key words Cymbidium , C. tortisepalum , C. omeiense , C. tortisepalum var. longibracteatum , C. cyperifolium var. szechuanicum , new combination , neotype , China.

摘要 基于对许多活植物的观察 对兰科中兰属的若干种类进行了分类学考订 ,结果承认菅草兰 Cymbidium tortisepalum 与峨眉春蕙 C. omeiense 为独立的种 ,将春剑 C. longibracteatum 移至菅草兰之下作为变种,送春 C. szechuanicum 移至莎叶兰 C. cyperifolium 之下作为变种。由于春剑、峨眉春蕙和送春的模式标本及引证标本已在 30 多年前全部丢失 本文指定了新模式。

关键词 兰属;菅草兰;峨眉春蕙;春剑;送春;新组合;新模式;中国

菅草兰(莲瓣) Cymbidium tortisepalum Fukuyama、春剑 C. longibracteatum Y. S. Wu et S. C. Chen、峨眉春蕙 C. omeiense Y. S. Wu et S. C. Chen、峨眉春蕙 C. omeiense Y. S. Wu et S. C. Chen 是兰属 Cymbidium Sw. 中广为栽培但颇有争议的分类群。虽然作为实体,它们在国兰界受到广泛的承认,但从分类学角度看,究竟是种还是变种,或者根本不能成立,只是品种而已,则一直未有定论。由于国兰拥有为数众多的爱好者,贸易额巨大,正确处理其分类学问题是有重要经济意义的;另一方面大量的活植株栽培于兰场、兰圃和出现于展览会与花卉市场上,也为分类学研究提供了丰富的材料。本文将分别予以讨论。

1 菅草兰与春剑

菅草兰 Cymbidium tortisepalum 是 Fukuyama(1934)根据台湾植物发表的新种,后来在台湾的兰科著作(林 赞标 1977;刘棠瑞,苏鸿杰,1978)中一直被承认,但它在大陆的近缘种直到上世纪50年代后期才被陆续发现。唐进、汪发缵教授曾将云南民间栽培的"莲瓣"命

名为 *Cymbidium lianpan* Tang et Wang ,但始终未正式发表 ,只在吴应祥的《中国兰花》(1993) 中有简要中文描述 ,但并未标定模式和使用拉丁文 ,故属于不合格发表。莲瓣与菅草兰是极相似的植物。《中国植物志》(陈心启 ,1999)首次将莲瓣并入菅草兰 ,看来是正确的。

菅草兰的另一个近缘种春剑 Cymbidium longibracteatum 发表于 1966 年。吴应祥、陈心启在发表时曾明确提出了该新种与菅草兰的亲缘关系,并认为后者萼片扭曲,苞片较短,以及唇瓣倒卵形而有别于春剑。后来,新种作者在 1980 年对国产兰属植物进行研究时,又将该种和菅草兰双双归入春兰 Cymbidium goeringii(Rchb. f.)Rchb. f. 之下作为变种。实际上此举的根据未必是充分的 因为两者的差别十分显著:春兰叶的下部有关节,花序通常只具 1 朵花;而春剑与菅草兰叶的下部无关节,花序通常具 3 – 5 朵花。大多数国兰爱好者都能正确无误地从无花的植株中检出春兰、菅草兰(莲瓣)与春剑。因此,本文恢复承认菅草兰(莲瓣)为独立的种,春剑也应移入共同组成一个种。有趣的是 Du Puy & Cribb(1988)承认了 Cymbidium goeringii var. tortisepalum (Fukuyama) Y. S. Wu et S. C. Chen,但将春剑置于其下作为异名。

春剑与莲瓣均属国兰著名的品系。两者之间有明显的区别,但其间也存在过渡类型, 故将它们视为同一个种之下的两个变种较为恰当。此两变种可以检索如下:

- 1. 叶柔软外弯 通常宽 0.4 1.2 cm ;花苞片近等长于花梗与子房 ,至少在花序顶端如此

 1. 叶柔软外弯 通常宽 0.4 1.2 cm ;花苞片近等长于花梗与子房 ,至少在花序顶端如此

 1. 叶较坚挺 ,直立性强 ,仅上部稍外弯 ,通常宽 1.3 1.8 cm ;花苞片明显长于花梗与子房

 春剑 C. tortisepalum var. longibracteatum

 萱草兰
- Cymbidium tortisepalum Fukuyama in Bot. Mag. (Tokyo) 48:304, fig. 1. 1934; T. P. Lin, Native Orch. Taiwan 2:129 130 (fig.). 1977; T. S. Liu et H. J. Su in Fl. Taiwan 5:948. 1978. Cymbidium goeringii (Rchb. f.) Rchb. f. var. tortisepalum (Fukuyama) Y. S. Wu et S. C. Chen in Acta Phytotax. Sin. 18(3):300. 1980; Du Puy et Cribb, Genus Cymbidium 185. 1988; S. C. Chen et Z. H. Tsi, Orch. China 96. 1998; S. C. Chen, Fl. Reip. Pop. Sin. 18:223. 1999. Cymbidium longibracteatum Y. S. Wu et S. C. Chen var. tortisepalum (Fukuyama) Y. S. Wu, Chinese Cymbidium, ed. 2, 139. 1993. Type: Taiwan, Fukuyama 3983 (holotype, KANA).

Cymbidium tsukengensis C. Chow in Taiwan Orch. Bull. 8: no. 2. 1970; et Formosan Orch., ed. 2, 41. 1974, nom. inval. (holotype not designated).

Cymbidium tortisepalum var. viridiflorum S. S. Ying , Colour. Ill. Indig. Orch. Taiwan 1: 415. 1977. Type: Taichung , Lishan , S. S. Ying 5282 (holotype , NTUF!)

Cymbidium lianpan Tang et Wang ex Y. S. Wu, Chinese Cymbidium, ed. 2, 138. 1993, nom, inval. (holotype not designated and without Latin diagnosis)

菅草兰(莲瓣) 原变种

var. tortisepalum

叶质地柔软 ,外弯 ,长(30 -)40 - 65 cm , 宽 4 - 12 mm。 花(2 -)3 - 5 朵 ;花苞片通常 近等长于子房(花序下部的略长于子房 ,上部的略短于子房)。 花期 1 - 3 月。

产中国台湾、云南西北部和四川西南部,生于透光的林中、林缘或疏生灌木的草坡上;

海拔 800 – 2500 m。

春剑 变种 改级新组合

Cymbidium longibracteatum Y. S. Wu et S. C. Chen var. flaccidifolium Y. S. Wu, Chinese Cymbidium, ed. 2, 138, 1993, nom. inval. (holotype not designated and without Latin diagnosis).

Cymbidium longibracteatum Y. S. Wu et S. C. Chen var. tonghaiense Y. S. Wu, l. c., nom. inval.

Cymbidium longibracteatum Y. S. Wu et S. C. Chen var. rubisepalum Y. S. Wu, l. c., nom. inval.

由于春剑的模式标本和引证标本在"文化大革命"中全部丢失了,此处选定刘仲健 22318 为新模式 PE!)。

叶较坚挺 ,直立性强 ,宽 1.3-1.5(-1.8) cm。花 3-5(-7)朵 ,花苞片明显长于花梗与子房 ,常围抱子房。花期 1-3 月。

产中国四川西部、贵州西部与云南西北部,生于杂木丛生的山坡上,多石之地或林缘;海拔1000-2500 m。

Cymbidium tortisepalum Fukuyama is treated here as a distinct species with two varieties , var. tortisepalum and var. longibracteatum , differing from C. goeringii (Rchb. f.) Rchb. f. by having longer leaves without an articulation toward the base , and usually 3-7-flowered inflorescences. These taxa hold a special place in the affections of Cymbidium lovers in China , where hundreds of orchid shows are held each year , and quite a lot of cymbidiums are displayed. Although Cymbidium tortisepalum var. tortisepalum looks similar to var. longibracteatum , they are distinguishable from each other. In the former the leaves are soft in texture , strongly arching and narrower (4-12 mm wide), and bracts are almost as long as the pedicel and ovary , while in the latter the leaves are rather rigid in texture , suberect and broader (13-18 mm wide), and bracts usually longer than the pedicel and ovary and embracing them. It is easy for any of Cymbidium lovers to distinguish them from each other. Either of them has numerous cultivars , and there is great difference in price between the two groups. It seems reasonable to recognize them as two separate varieties of the same species.

2 峨眉春蕙

峨眉春蕙 *Cymbidium omeiense* Y. S. Wu et S. C. Chen 的模式标本是采自四川峨眉山的栽培植物。至今各地兰圃栽培的植物均来自峨眉山 其他地方尚未发现 是一个窄域分布的种。

该种植物在发表时(Wu & Chen, 1966),曾被认为接近于蕙兰 C. faberi Rolfe。后来原作者(Wu & Chen, 1980)又将它移入蕙兰之下,作为它的变种:C. faberi var. omeiense (Y. S. Wu et S. C. Chen) Y. S. Wu et S. C. Chen。这一观点一直保持至新近出版的《中国植物志》(第 18 卷)中仍未改变(Chen & Tsi, 1998; Chen, 1999)。但 Du Puy & Cribl(1988)并不认可,而将此实体归并入寒兰 C. kanran Makino 作为异名。这显然是欠考虑的。峨眉春蕙又称二八蕙,每年有 2 次花期(2-4 月与 10-11 月),其体态也明显不同于蕙兰与寒兰 现比较如下:

表 1 峨眉春蕙、蕙兰和寒兰比较表

Table 1 A comparison of Cymbidium omeiense, C. faberi and C. kanran

	形态 Morphology									
分类群 Taxon	假鳞茎 Pseudobulb	长度 Length	关节 Joint	叶 Leaf 脉 Nerves	边缘 Margin	花葶长 Length of scape	开花 Flowering	唇瓣中裂片 Mid-lobe of lip		
峨眉春蕙 C. omeiense	不明显 inconspicuous	15 - 30 (- 35) cm	无 absent	不透明 not translucent	稍具细齿 slightly ser- rulate	15 - 17 cm	一年 2 次 twice a year	稍具乳突 slightly papillose		
蕙兰 C. faberi	不明显 inconspicuous	(25 -) 35 - 80 cm	无 absent	半透明 translucent	具锐锯齿 sharply serrate	30 - 50 cm	一年 1 次 once a year	密生乳突 densely papillose		
寒兰 C. kanran	明显 conspicuous	40 – 70 cm	有 present	不透明 not translucent	稍具细齿 slightly serrulate	25 - 60 cm	一年 1 次 once a year	稍具乳突 slightly papillose		

从上表可以看出 峨眉春蕙与寒兰的差别极其明显。在 8 项形态特征的比较中,仅叶缘略具细齿与叶脉不透明为两者所共有,其他 6 项均不相同,可见两者并无明显的亲缘关系,归并是缺乏根据的。而与蕙兰之间,则相同之处亦仅有 2 项,但最为重要的叶脉与叶缘特征表明,两者亦相距甚远,作为其变种也未必合适。因此,本文仍维持原发表时的观点,将峨眉春蕙视为一个独立的种。

峨眉春蕙

Cymbidium omeiense Y. S. Wu et S. C. Chen in Acta Phytotax. Sin. 11(1):32, pl. 5:4-6. 1966. Type: China. Sichuan, Emei Shan, cult. pl., Y. L. Fee 2099 (holotype, PE, destroyed). — Cymbidium faberi Rolfe var. omeiense (Y. S. Wu et S. C. Chen) Y. S. Wu et S. C. Chen in Acta Phytotax. Sin. 18(3):299. 1980; Y. S. Wu, Chinese Cymbidium, ed.2, 45. 1993; S. C. Chen et Z. H. Tsi, Orch. China 94. 1998; S. C. Chen, Fl. Reip. Pop. Sin. 18:220. 1999. Neotype: China. Sichuan, Emei Shan, Z. J. Liu 22319 (PE!, here designated).

由于峨眉春蕙的模式标本和引证标本在"文化大革命"中全部丢失了,此处选定刘仲健 22319 为新模式(PE)。

假鳞茎不明显。叶 4-5 枚 ,长 10-25(-35)cm ,宽 6-10 mm 基部无关节 ,叶脉不透明 ,边缘有时稍具细锯齿。花葶直立 ,长 15-17cm。花期 2-4 月。

产中国四川峨眉山, 生境不详。四川、云南、北京、广东等地常见栽培。

Cymbidium emeiense Y. S. Wu et S. C. Chen was established in 1966, but recognized as a

variety of *C. faberi* Rolfe by the same authors in 1980 and reduced to synonymy of *C. kanran* Makino by Du Puy & Cribb in 1988. Recently, a comparison of living plants between *C. emeiense*, *C. faberi* and *C. kanran* showed that *C. emeiense* is quite different from either *C. faberi* or *C. kanran* (Table 1). Its original rank is thus followed.

3 送春

送春 Cymbidium szechuanicum Y. S. Wu et S. C. Chen 发表于 1966 年,其模式标本是采自四川邛崃山的栽培植物。送春又称绿兰,分布很广,栽培也十分广泛。此植物自 1980 年被移入蕙兰作为变种后,一直为各方面所接受。 Du Puy & Cribb (1988) 在承认此变种的同时,曾正确指出了该实体与莎叶兰 C. cyperifolium Wall. ex Lindl.的相似性。近来,我们根据大量的活植株将送春、蕙兰、莎叶兰三者之间作了比较 结果见下表:

表2 送春、莎叶兰及蕙兰的比较表

Table 2 A comparison between Cymbidium szechuanicum , C. cyperifolium and C. faberi

-				πz	* * * * * * * * * * * * * * * * * * *						
分类群 Taxon	形态 Morphology										
	根 Roots	假鳞茎 Pseudobulb	关节 Joint	数目 Number	叶 Leaf 叶脉 Nerves	边缘 Margin	花期 Flowering	新植株产出 Production of new growth			
送春 C. szechuanicum	有毛 hairy	明显 conspicuous 1-3×1 cm	有 present	9 – 13	不透明 not translucent	近全缘 nearly entire	2-4月 Feb Apr.	1年1次 once a year			
莎叶兰 C. cyperi- folium	有毛 hairy	明显 conspicuous 1-3×1 cm	有 present	9 – 20	不透明 not translucent	近全缘 nearly entire	10 – 11 月 Oct. – Nov.	2年1次 once two years			
蕙兰 C. faberi	无毛 glabrous	不明显 inconspicu- ous	无 absent	4 – 8	半透明 translucent	具锐利锯 齿 sharply serrate	3-4月 Mar Apr.	1年1次 once a year			

从上表可以看出,送春的许多形态特征,如根、假鳞茎、叶的特征均明显接近于莎叶兰而不是蕙兰。特别是稠密的根毛,在全属中只存在于莎叶兰与送春之中,其他种类是一律无根毛的。但它与莎叶兰也有不同之处,如花期和新芽生长的情况。此外,叶基部二列套叠的程度也有差异。莎叶兰每年长出新叶,但须2年才发出新芽。而送春无此现象,每年可以长出新芽。因此,我们认为将送春移入莎叶兰作为变种较为恰当。

送春 变种 改级新组合

Cymbidium cyperifolium Wall. ex Lindl. var. szechuanicum (Y. S. Wu et S. C. Chen) S. C. Chen et Z. J. Liu, comb. et stat. nov. — Cymbidium szechuanicum Y. S. Wu et S. C. Chen in Acta Phytotax. Sin. 11(1):33, pl. 5:9-11. 1966. — Cymbidium faberi Rolfe var. szechuanicum (Y. S. Wu et S. C. Chen) Y. S. Wu et S. C. Chen in Acta Phytotax. Sin. 18 (3):299. 1980; Du Puy et Cribb, Genus Cymbidium 181, pl. 26, phot. 131, fig. 30:1, 3; 31. 1988; Y. S. Wu, Chinese Cymbidium, ed. 2, 45. 1993; S. C. Chen et Z. H. Tsi, Orch. China 84. 1998; S. C. Chen, Fl. Reip. Pop. Sin. 18:220. 1999. Type: China. Sichuan, cult. pl. Y. S. Wu 2040 (holotype, PE, destroyed). Neotype: China. W Sichuan, Qionglai Shan, Z. J. Liu 22321 (PE!, here designated).

由于送春的模式标本和引证标本在"文化大革命"中全部丢失了,此处选定刘仲健

22321 为新模式(PE!)。

根具毛。假鳞茎小,长 1-3 cm,直径约 1 cm。叶 9-13 枚,质软,外弯,叶脉不透明,基部稍二列套叠,边缘近全缘。花苞片通常等长于花梗与子房;花常为黄绿色,也有其他色泽,有香气。花期:2-3 月。

产中国四川、云南、贵州等省、各地广为栽培。

Cymbidium szechuanicum Y. S. Wu et S. C. Chen was described in 1966, and has been recognized as a variety of C. faberi Rolfe since the reduction was made by the same authors in 1980. However, there is some indication of its habit and floral features similar to those of C. cyperifolium Wall. ex Lindl. Recently a comparison of living plants of this entity with C. cyperifolium and C. faberi has shown that it is closely related to C. cyperifolium rather than C. faberi (Table 2). Du Puy & Cribb (1988) correctly indicated its resemblance in growth habit to C. cyperifolium, though they followed the treatment by Wu & Chen (1980). It is interesting to note that the pseudobulbs in C. cyperifolium are not produced annually but grow and flower for two years before producing new growth, a growth habit similar to that of C. eburneum Lindl., while the pseudobulbs in C. szechuanicum are produced annually. It seems suitable to treat it as a variety of C. cyperifolium.

参 考 文 献

- Chen S-C (陈心启). 1999. Cymbidium. In: Flora Reipublicae Popularis Sinicae (中国植物志). Beijing: Science Press. 18: 191 227.
- Chen S-C (陈心启), Tsi Z-H (吉占和). 1998. The Orchids of China (中国兰花全书). Beijing: China Forestry Publishing House. 1 365.
- Du Puy D, Cribb P. 1988. The Genus Cymbidium. London, Portland, Oregan: Christophor Helm Timber Press. 1 – 204.
- Liu T-H (刘棠瑞), Su H-J (苏鸿杰). 1978. Orchidaceae. In: Flora of Taiwan (台湾植物志). Taipei: Epoch Publishing Co. Ltd. 5: 857 1137.
- Wu Y-S (吴应祥). 1993. Chinese *Cymbidium* (中国兰花). 2nd ed. Beijing: Publishing House of Forestry. 1 67.
- Wu Y-S (吴应祥), Chen S-C (陈心启). 1966. Tres species novae generis Cymbidii e Provincia Szechuan. Acta Phytotaxonomica Sinica (植物分类学报) 11: 31 – 34.
- Wu Y-S (吴应祥), Chen S-C (陈心启). 1980. A taxonomic review of the orchid genus *Cymbidium* in China. Acta Phytotaxonomica Sinica (植物分类学报) 18: 292 307.